REMARKS

I. STATUS OF CLAIMS

Claims 1-5 and 21-35 are pending and stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,493,761 to Baker et al. (hereinafter, Baker). Without acquiescing to the rejection, and solely to expedite putting the claims in a condition for allowance, Claims 1 and 21 have been amended herein to recite that the claimed data parser recognizes the record and field structures of the non-field delineated database records. Support for these amendment can be found, at least, in paragraph [0077] of Applicants' published application. Applicants believe all claims are in a condition for allowance and respectfully request reconsideration and withdrawal of all rejections under 35 U.S.C § 102(e).

II. INTERVIEW SUMMARY

A telephonic interview was conducted on September 8, 2008 between Examiner Pham and the undersigned. The parties discussed the Baker reference with regard to independent Claims 1 and 21, but were not able to reach an agreement that Baker does not teach processing non-field delineated data. Examiner Pham indicated that an assumption was made, in rejecting Claims 1-5 and 21-35, that there must be some sort of marker delineating the fields in the non-field delineated data in Applicants' invention, as there are in the field delineated data parsed in Baker, else the claimed data parser would not be able to parse non-field delineated database records into field delineated data. Examiner Pham indicated that further distinction regarding how the claimed data engine parses non-field delineated data into field delineated data would likely overcome the Baker reference. Claims 1 and 21 have been amended to address this suggestion by Examiner Pham. It is believed that entry of the foregoing amendment is timely and will allow all claims pending in the application to pass to issue. The undersigned thanks Examiner Pham for his time and assistance.

III. DISCUSSION OF EXAMPLE EMBODIMENTS OF THE PRESENT INVENTION

Without limitation to the claims, embodiments of the present invention relate to a data engine of a Programmable Streaming Data Processor (PSDP) which is arranged to perform

primitive functions directly on database records. A data parser in the data engine can be programmed to recognize the record and field structures of data received from a source, such as a mass storage device, and parses non-field delineated data from the streaming data source into field delineated data under instruction from an external processing unit. The data engine employs logical arithmetic methods to compare fields with one another, or with values otherwise supplied by general purpose processors, to precisely determine which records are worth selecting to be transferred to memory for further processing by the more general purpose distributed Job Processing Units (JPUs).

In a preferred embodiment, before commencing to read and analyze a particular database, software running on the CPU of the JPU programs the PSDP with the particulars of the database format. The PSDP can then locate block header field, record header field, and record data field boundaries. An output tuple is then formed comprised of the fields of the source record of the disc that are to be selected for further processing by the CPU and PSDP. Thus, the data engine allows the PSDP to perform certain preliminary processing in order to reduce the computational load on the local CPU.

IV.   REJECTIONS UNDER 35 U.S.C. § 102(e)

Claims 1-5 and 21-35 stand rejected under 35 U.S.C. § 102(e) as being unpatentable over Baker. Applicants traverse this rejection based on the Examiner's continued failure to establish a prima facie case of anticipation based on the cited reference. Baker does not disclose all of the elements of the independent claims including, but not limited to, how the data engine pareses non-field delineated data.

Baker relates to a data parsing and analysis system that is capable of searching, filtering, gathering statistics, and converting files across multiple data editors employing various character sets and document formats. The data parsing and analysis system views data, such as a document or a file, as though it were a data frame. Thus, for the purpose of searching, filtering, and converting from one format to another, bracket matching, or collecting statistics, the document may be parsed as a stack of programmably defined protocols, just as if the document were a data frame on a computer network.

As described in column 38, lines 26-31 of Baker, the system may convert one data editor control character set into another data editor control character set by defining the desired data editor control conversion as a series of replacement values associated with each single-or multi-byte control character of the source data editor control character set.

As described in paragraphs [0016] and [0017] of Applicants' published application, software running on the CPU of the JPU programs the PSDP with the particulars of the database format. The data engine can then parse non-field delineated, streaming data from the mass storage device into field delineated data. In other words, the data engine can be programmed to recognize and understand the record and field structure of the data received from the mass storage device to locate block header field, record header field, and record data field boundaries.

However, the data parsed in Baker is not even non-field delineated. Quite to the contrary, the data parsed in Baker is explicitly described as being field delineated. For example, as described at column 3, lines 40-43 of Baker, a preferred embodiment of Baker's logic control module includes logic for "extracting field values from a particular file and making parsing decisions based upon field values and information in protocol descriptions." Further, column 6, lines 23-25 of Baker, referring to FIG. 1, teaches that the data storage devices 14 stores data files having records containing data stored in a plurality of predefined fields.

This further supported by the Examiner's own admission in the Response to Arguments section on page 7 of the Final Office Action. It appears that the Examiner is mistaken regarding the operation of the data parser in Barker. According to the Examiner in item 5:

> Baker teaches at Col. 30 an exemplary file to be parsed which
> includes a plurality of database records as shown in Example 1.
> Baker also teaches at Example 2 that the parsed file[] is stored as
> a[] stream of non-field delineated characters (emphasis added).

However, parsing what the Examiner asserts are "a plurality of database records as shown in Example 1" into "a[] stream of non-field delineated characters (emphasis added)" in Example 2 is not the same as parsing non-field delineated database records into field delineated data by the claimed data parser. In fact, parsing field-delineated data into non-field delineated data is the exact opposite of what is recite in Claim 1.

Moreover, during the telephonic Examiner interview, Examiner Pham indicated that an assumption was made that there must be some sort of marker delineating the fields in the non-

field delineated data in example embodiments of the present invention, else the claimed data parser would not be able to parse non-field delineated database records into field delineated data. However, the Examiner clearly failed to fully understand Applicant's claimed invention.

First, if such markers were indeed present in the data parsed in example embodiments of the present invention, the data would no longer be non-field delineated. Rather, such markers (*i.e.*, delineations) would make the data, as in Baker, field delineated. Further, as described in paragraph [0077] of Applicants' published application, the PSDP may be programmed to understand the contents of data coming from, for example, a database in order to determine where field boundaries should be and parse non-field delineated data into field delineated data. For example, in an example embodiment of the present invention:

> the PSDP can be programmed to recognize that a certain set of records in a database has a specified format, for example, a preamble or "header" of determined length and format, perhaps a field including the length of the record, followed by data including some number of fields of a certain type and length (e.g., 4-byte integers), followed by some number of fields of a different type and/or length (e.g., 12-byte character strings), followed by some number of fields of variable length, whose first few bytes specify the length of the field in some agreed-upon manner, and so forth.

Based on (1) the admission by the Examiner on page 7 of the Final Office Action in item 5 that Baker parses field delineated data into non-fields delineated data (*i.e.*, the opposite of what Applicants claim), and (2) the amendments made to Claims 1 and 21 which should resolve any misunderstanding by the Examiner regarding the operation of the data engine, it is clear that Baker does not anticipate the claims. Therefore, there is no teaching in Baker of parsing non-field delineated data into field delineated data.
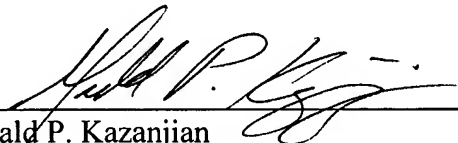
Baker does not anticipate the claims because Baker's logic control module does not <u>parse non-field delineated database record into field delineated data</u>. Applicants also note that there are at least three other elements of these claims missing in Baker, particularly the fact that Baker (1) does not <u>assemble filtered field delineated data into an output tuple</u>, (2) does not <u>process streaming database records</u>, and (3) is not <u>located in a programmable pipeline processor</u>.

V.   <u>CONCLUSION</u>

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By _____

Gerald P. Kazanjian
Registration No. 61,699
Telephone: (978) 341-0036
Facsimile: (978) 341-0136

Concord, MA 01742-9133
Date: 9/24/08